

PARAMETER	MOD-1	USE	NAME	FULL NAME (if useful)
FOR EACH STAR (excluding extra parameters for variable stars)				
Five standard astrometric parameters	5	5	Five	
Photometry: mag plus normalized colors	5	5	Photo	Photometry
Astrophysical star parameters (temperataure, surface g, metallicity, and reddening)	4	4	AstStar	
Orbital elements (+ mass) for multi-star systems, per stellar companion	7	7	SysEl	System Elements
Orbital elements (+ mass) for each sub-stellar companion	7	7	PIEI	Planet Elements
FOR EACH VARIABLE STAR				
Class	1	1	VClass	
Period and related parameters	10	10	VParam	
FOR THE MISSION AS A WHOLE				
Number of stars	4E+07	4E+07	Stars	Below: est
Number of stars that are modeled as variable	24000	24000	VStars	From Aller
Average total number of stars in a system	1.5	1.5	Mult	Multiplicity
Average number of sub-stellar companions (detected / studied) per star	0.1	0.1	Comp	Companion count
FOR THE INSTRUMENT AS A WHOLE				
Number of astrometric chips	20	20	AChips	
Number of photometric chips	4	4	PChips	
Number of chips	24	24	Chips	
Basic angle (history)	100	100	Basic	
Number of batches	2000	2000	Batches	
Single batch rotation model	300	300	Rot	
Spacecraft mass distribution, m, mx, mxx	10	10	Mass	
Number of sets of spacecraft mass parametrs (history)	100	100	NMass	
Radiation pressure parameters of shield	10	10	SRad	
Number of sets of radation prarameters for the shield (history)	20	20	NSRad	
PSF variation over field	100	100	PSFS	PSF spatial variation
PSF variation over time	100	100	PSFT	PSF temporal variation
FOR EACH CCD CHIP				

Location and orientation	#	3	3 CCDLoc
Amplitude of cyclic biases, including time-dependent part	#	40	40 CycB
Bias in event time as function of column number (depends on wavelength, time, temperature?)	#	200	200 EvntB
Locations and characteristics of bad pixels and traps	#	1000	1000 BadPix
Amplifier and ADC characteristics	#	10	10 AmpADC

#### FAME Parameter List – Analysis

Last update = 4/21/99

Quantities from the definition sheet are marked with a pound sign. # **TOTALS**

#### FOR EACH STAR

Standard astrometric parameters	#	5	
Photometric parameters	#	5	
Astrophysical parameters	#	4	
Average number of multiplicity parameters per star		3.5	
Average number of planetary companion parameters per star		0.7	
TOTAL PER STAR		18.2	
TOTAL		7.28E+08	

#### FOR THE INSTRUMENT AS A WHOLE

Basic angle (model or history)	#	100	
Rotation model parameters		600000	
Mass parameters		1000	
Shield radiation parameters		200	
TOTAL		601300	

#### FOR EACH CCD CHIP

Location and orientation	#	3	
Cyclic biases	#	40	
Amplifier and ADC characteristics	#	10	

Event time bias	#	200
Bad pixels	#	1000
TOTAL PER CHIP		1253
TOTAL		30072

### MISSION SUMMARY

TOTAL		7.29E+08
Non-star parameters		631372
Ratio of non-star to total parameters		0.000867